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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/728,546 | 12/05/2003 | Carol J. Buck | 3607-106.4 US | 8795 |

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| EXAMINER | |
|---|---|
| YU, GINA C | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1617 | |

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/728,546 | BUCK, CAROL J. | |
| | Examiner | Art Unit | |
| | Gina C. Yu | 1617 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *31 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-79* is/are pending in the application.

4a) Of the above claim(s) *1-22,34-44 and 57-79* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23-33 and 45-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/2/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election with traverse of Group II, claims 23-33 and 45-56, in the reply filed on July 31, 2006 is acknowledged. The traversal is on the ground(s) that a search of Group II would, according to applicant, uncover the compositions of Group I and the method of Group III. This is not found persuasive because Group I and III is directed to a patently distinct invention. As discussed in the previous restriction requirement dated July 5, 2006, the nonelected groups require polyethylene glycol monostearate in the claims. The elected claims instead require an enzyme in the claimed composition, thus search of the all unrelated and patently distinct claimed inventions would impose an undue burden on the examiner.

The requirement is still deemed proper and is therefore made FINAL.

### *Priority*

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the

requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

This application repeats a substantial portion of prior applications and adds and claims additional disclosure not presented in the prior application. As applicant has acknowledged, this case is a continuation-in-part of application No. 10/309,510, which is a divisional of Application No. 09/514,049, which is a continuation-in-part of Application No. 09/023,449. The parent cases do not disclose enzyme, and thus fail to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. Should applicant desire to obtain the benefit of the filing date of the prior application, attention is directed to 35 U.S.C. 120 and 37 CFR 1.78.

### *Claim Objections*

Claims 32 and 44 are objected to because of the following informalities: in line 1 of these claims, acetic and ethanoic acids are recited in Markush language as alternative limitations. However, acetic acid and ethanoic acids are synonyms well known in the art. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 23, 25, 26, 28, 32, 33, 45, 47, 48, 50, and 54-56 are rejected under 35 U.S.C. 102(b) as being anticipated by Eilertsen et al. (US 4497897) ("Eilertsen").**

Claim 23 is directed to a composition comprising an alkanoic acid and an enzyme. The phrase "hair straightening" is a preamble since it refers to an intended future use of the composition and does not render structural limitation to the claimed invention. Thus no patentable weight is given to the phrase. See MPEP § 2111.02. Similarly, in claim 45, the phrase "hair straightening and style-maintaining" is also directed to an intended use of the claimed composition. While claims 33 and 56 require that the claimed composition be in the form of "rinse-off or leave-in conditioner", the recitation here also defines how the composition is used. Also in the same claims, the phrase " the composition is to be applied before or after dyeing . . . or between two stages of hair-straightening" is not considered as a claim limitation as it is directed to the intended use of the composition.

Eilertsen discloses a liquid composition comprising Alcalase ® concentrate and acetic acid. See Example 1. The reference teaches that the liquid enzyme concentrates contain a buffer and endopeptidase of Substilisin Carlsberg having enzymatic activity corresponding to 2-3 AU/g, wherein the buffer is acetic acid. See col. 2, lines 1 -31;col. 3, lines 15 – 66; instant claims 23, 25, 26, 28, 32, 33, 45, 47, 48, 50,

54-56. The composition is a suspension of the enzyme in propylene glycol, which is subsequently filtered and buffered with acetic acid. See Example 1.

**Claims 23, 25-27, 29, 31, 32, 45, 47-49, 51, and 53-55 are rejected under 35 U.S.C. 102(a) and (e) as being anticipated by Hansen et al. (US 2003/0129276 A1) ("Hansen"), and further evidenced by applicants' own disclosure.**

Hansen discloses a method of enzymatically treating cocoa liquor in chocolate crumb processing by hydrolysis with 0.1 M acetic acid and 2 % Flavourzyme. See Example 1, par. [0035] – [0040]; instant claims 23, 29, 32, 45, 51, 54, and 55. The reference teaches that the enzyme is a protease having endoprotease and/or exoprotease. See par. [0015]; instant claims 26, 48. Examiner views that the chocolate flavor liquor in the composition meets the "fragrance" and "odor masker" limitations of instant claims 31 and 53. The present claims 29 and 51 disclose that Flavourzyme is an aminopeptidase, thus instant claims 27, 29, 49, and 51 are also met. The preambles of instant claims 23 and 45 are not given patentable weight, as discussed above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**Claims 23-25, 30-33, 45-47, and 52-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller et al. (US 5002761) ("Mueller") in view of Derwent**

**Acc. No. 1988-157179 (Abstract of JP 63096107 A) ("Shiseido") and Data Sourcebook for Food Scientists and Technologists (1991, Y. H. Hui) ("Hui").**

Mueller teaches hair treatment composition comprising up to 20 wt % of an inorganic and/or an organic acid. See col. 2, lines 23 – 42; instant claims 30 and 52. Acetic acid is taught. See col. 2, lines 52-66; instant claims 32, 54, and 55. The operating examples show compositions comprising about 90.4-95 wt % of water. See instant claims 30 and 52. Perfumes are added in the compositions. See col. 4, lines 20 – 28; instant claims 31 and 53. The reference teaches that the prior art compositions are in the form of cream. See col. 3, lines 36 – col. 4, line 2; instant claims 33 and 56. The reference teaches that the treatment provides the wet and dry combability and reduces the electrostatic chargeability of the hair. The preambles of instant claims 23, 33, 45, and 56 are not given patentable weight, as discussed above.

Mueller fails to teach enzyme.

Shiseido teaches powder biological composition comprising Aspergillus oryzae. See abstract. The reference teaches that the powder is mixed with appropriate water or lotion and applied to hair, and provides luster to the hair.

Hui teaches that Aspergillus oryzae is a source of amylase enzyme. See instant claims 23, 25, 45, and 47.

It would have been obvious to one of ordinary skill in the art at the time of the present invention to modify the composition of Mueller by incorporating the cosmetic powder mixture which comprises enzymes such as Aspergillus oryzae, as motivated by Shiseido and Hui, because 1) both references are directed to hair treatment

compositions having aqueous phase art; and 2) Shiseido teaches that biological materials comprising Aspergillus oryzae provide luster to hair; and 3) Hui teaches that Aspergillus oryzae contains enzymes. The skilled artisan would have had a reasonable expectation of successfully producing a stable composition because the Mueller composition is an aqueous emulsion base and Shiseido teaches that the enzyme material is mixed in aqueous compositions.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claims 23-25, 30-33, 45-47, and 52-56 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,517,822 B1 in view of in view of Shiseido and Hui.**

Claim 1 of the '822 patent is directed to a composition consisting essentially of about 8-30 % by weight of at least one alkanoic acid, an acceptable diluent, and less than about 30 % of at least one auxiliary component selected from a fragrance, an odor masker, conditioner, gelling agent and penetration enhancer. See instant claims 23, 24, 30-33, 45, 46, 52-56.

The '822 does not disclose using enzyme in the composition, however, claims 2 and 3 of the patent further include at least one more auxiliary component.

Shiseido, as discussed above, teaches powder biological composition comprising Aspergillus oryzae. See abstract. The reference teaches that the powder is mixed with appropriate water or lotion and applied to hair, and provides luster to the hair.

Hui teaches that Aspergillus oryzae is a source of amylase enzyme. See instant claims 23, 25, 45, and 47.

It would have been obvious to one of ordinary skill in the art at the time of the present invention to modify the claimed invention of '822 by incorporating biological cosmetic material which comprises enzyme, as motivated by Shiseido and Hui, because 1) both '822 and Shiseido are directed to hair treatment compositions having aqueous phase; 2) the '822 composition comprises auxiliary agents; and 3) Shiseido teaches the biological materials which provide luster to hair, and, according to Hui, comprises enzymes. The skilled artisan would have had a reasonable expectation of successfully producing a stable composition because the '822 composition has an aqueous base and Shiseido teaches that the enzyme material is mixed in aqueous compositions.

***Conclusion***

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gina C. Yu whose telephone number is 571-272-8605. The examiner can normally be reached on Monday through Friday, from 8:00 AM until 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gina C. Yu
Patent Examiner